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CLAIMS

WE CLAIM:

1. A medication dispensing apparatus comprising:

a housing;

a drive member movable within said housing;

a fluid container defining a medicine-filled reservoir with a movable piston at one end and an outlet at the other end, said piston engagable by said drive member to be advanced toward said outlet in a distal direction when said drive member is moved; and

a dosing and injecting assembly for selectively shifting said drive member, said dosing and injecting assembly including an actuator and a dosing member, said dosing member operable to selectively set a dose to be delivered, said actuator movable relative to said housing in a direction transverse to said distal direction between a ready position and any one of a plurality of dosed positions, wherein said actuator, responsive to said dosing member being operated to selectively set a particular dose to be delivered, moves from said ready position to a particular dosed position that corresponds to the particular dose selectively set, and wherein said drive member, responsive to said actuator being manually shifted from said particular dosed position back to said ready position, moves to shift said piston distally to cause said set dose to be delivered through said outlet.

2. The medication dispensing apparatus of claim 1 wherein a distance said actuator moves in the direction transverse to said distal direction during movement from said ready position is proportional to a size of the selected dose.

3. The medication dispensing apparatus of claim 2 wherein said actuator comprises a pivoting element that swings away from said housing when moved from said ready position to any one of said plurality of dosed positions, and wherein the angular size of the arc through which said pivoting element swings during movement from said ready position is proportional to a size of the selected dose, whereby the position of said pivoting element serves as a visible indicator of relative dose size.

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4. The medication dispensing apparatus of claim 1 wherein said dosing and injecting assembly includes a rack and pinion gearing between said actuator and said dosing member.

5 5. The medication dispensing apparatus of claim 4 wherein a portion of said dosing member within said housing comprises said rack.

6. The medication dispensing apparatus of claim 4 wherein said actuator comprises at least a portion of a ring gear in engagement with a pinion rotatable with said
10 pinion of said rack and pinion gearing.

7. The medication dispensing apparatus of claim 6 wherein said pinion in engagement with said ring gear, and said pinion of said rack and pinion gearing, are arranged coaxially.
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8. The medication dispensing apparatus of claim 1 wherein said dosing member is manually rotatable to selectively set the dose, wherein rotation of said dosing member to increase the dose setting causes said dosing member to move in a direction opposite the distal direction from a retracted position to one of a plurality of extended
20 positions, said dosing member, when disposed in any one of said plurality of extended positions, projecting farther out from said housing than when disposed in said retracted position.

9. The medication dispensing apparatus of claim 8 further comprising means
25 for biasing said dosing member from any of said plurality of extended positions toward said retracted position.

10. The medication dispensing apparatus of claim 8 wherein said dosing member, responsive to said actuator being manually shifted from any one of said plurality
30 of dosed positions to said ready position, axially moves without rotating from any one of said plurality of extended positions back to said retracted position.

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11. The medication dispensing apparatus of claim 1 wherein said dosing and injecting assembly includes a drive screw rotatable with said dosing member and threadedly engaged with said drive member, wherein said drive member is rotatably fixed within said housing such that rotation of said drive screw produces an axial motion of said drive member relative to said drive screw.

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12. The medication dispensing apparatus of claim 11 further comprising means for permitting said drive screw to rotate relative to said dosing member for drive member resetting.

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